

OBSERVATIONS & RECOMMENDATIONS

After reviewing data collected from **MOUNTAINVIEW LAKE** the program coordinators recommend the following actions.

FIGURE INTERPRETATION

- Figure 1: These graphs illustrate concentrations of chlorophyll-a in the water column. Algae are microscopic plants that are a natural part of lake ecosystems. Algae contain chlorophyll-a, a pigment necessary for photosynthesis. A measure of chlorophyll-a can indicate the abundance of algae in a lake. The historical data (the bottom graph) show a *fairly stable* in-lake chlorophyll-a trend. Chlorophyll concentrations were slightly elevated in June and were above the state mean. The summer mean chlorophyll concentration was below the state mean. Spring rain may have flushed excess nutrients into the lake and caused an increase in algal growth. Productivity decreased in July and August to background levels. While algae are present in all lakes, an excess amount of any type is not welcomed. Concentration can increase when there are external and internal sources of phosphorus, which is the nutrient algae depend upon for growth. It's important to continue the education process and keep residents aware of the sources of phosphorus and how it influences lake quality.
- Figure 2: Water clarity is measured by using a Secchi disk. Clarity, or transparency, can be influenced by such things as algae, sediments from erosion, and natural colors of the water. The graphs on this page show historical and current year data. The lower graph shows a *slightly decreasing* trend in lake transparency. Water clarity decreased this season possibly as a result of the overall increase in algal abundance. Mean transparency was the lowest the lake has ever experienced and we hope that transparency results recover next season. The 2000 sampling season was considered to be wet and, therefore, average transparency readings are expected to be slightly lower than last year's readings. Higher amounts of rainfall usually cause more eroding of sediments into the lake and streams, thus decreasing clarity.
- Figure 3: These figures show the amounts of phosphorus in the epilimnion (the upper layer in the lake) and the hypolimnion (the lower layer); the inset graphs show current year data. Phosphorus is

the limiting nutrient for plants and algae in New Hampshire waters. Too much phosphorus in a lake can lead to increases in plant growth over time. These graphs show a *stable* trend for in-lake phosphorus levels. The phosphorus concentration in both layers of the lake was consistent with last season's results. Hypolimnetic phosphorus concentration was elevated in August. The turbidity results indicate that there might have been contamination of the sample with bottom sediment, which can raise the phosphorus concentration and yield inaccurate results. Both layers had a mean concentration below the state median. One of the most important approaches to reducing phosphorus levels is educating the public. Humans introduce phosphorus to lakes by several means: fertilizing lawns, septic system failures, and detergents containing phosphates are just a few. Keeping the public aware of ways to reduce the input of phosphorus to lakes means less productivity in the lake. Contact the VLAP coordinator for tips on educating your lake residents or for ideas on testing your watershed for phosphorus inputs.

OTHER COMMENTS

- The *E. coli* problems at Hamel Brook continue to baffle the volunteers of Mountainview Lake and the biologists at the NHDES. Numerous samples were collected at this brook during the summer, and twice DES biologists took additional samples upstream from the usual sampling locations. The results varied depending upon the weather conditions prior to sampling. Regardless, a conclusion has not been reached. We plan to visit the brook again during a spring snowmelt or rain event.
- In July, the conductivity result for the Epilimnion was questionable (Table 6). Historically, there has never been a conductivity result close to that of 786.0 $\mu\text{Mhos/cm}$ measured during July. We also believe the August conductivity for Hamel Bk @ 103 is questionable. This result is extremely low for Hamel Bk, although it is a desirable reading, we believe there was an error in data entry.
- Conductivity and turbidity (Table 11) were high for Rt. 103 Inlet in August. The phosphorus concentration was also slightly elevated (Table 8). When testing the Inlet, please be sure to only sample water that has sufficient flow for a clean sample. Testing Inlets where the water is stagnant or the flow is too low for a clear sample can yield inaccurate results.
- Dissolved oxygen was low in the bottom two meters of the lake during June (Table 9). The process of decomposition in the sediment depletes dissolved oxygen on the bottom of thermally stratified lakes. As bacteria break down organic matter, they deplete oxygen in the water. When oxygen gets below 1 mg/L, phosphorus normally bound up in the mud may be released into the water column, a process that is referred to as *internal loading*. Depleted oxygen in the hypolimnion

usually occurs as the summer progresses. We suggest scheduling a visit with the VLAP coordinator in August next year so we can track oxygen depletion in the water column. This explains the higher phosphorus in the hypolimnion (lower water layer) versus the epilimnion (upper layer). Since an internal source of phosphorus to the lake is present, limiting or eliminating external phosphorus sources in the lake's watershed is even more important for lake protection.

NOTES

- Monitor's Note (6/19/00): 2 loons seen.
- Monitor's Note (7/17/00): Rain lately. Gravel covered Hamel Brook bed this end of the culvert about 20-25 feet. Must have come from Goshen Rd. – across the road about 20-25 feet from tar, gravel had been used to fill an erosion site on the brook's banking and this had badly eroded into the brook, and so down the culvert to the other side.
- Monitor's Note (8/7/00): Water level still high, about a foot above normal for August. It has been high all summer. Overcast, intermittent sprinkles, turned to downpour. Rain last night.
- Biologist's Note (8/7/00): TNTC – too numerous to count. E.coli results greater than 400.

USEFUL RESOURCES

The Wetlands Resource, WD-WB-7, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Save Our Streams Handbook for Wetlands Conservation and Sustainability. (800) BUG-IWLA, or visit www.iwla.org

A Brief History of Lakes, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

In Our Backyard. 1994. Terrence Institute, 4 Herbert St., Alexandria, VA. 22305, or call (800) 726-4853.

Septic Systems and Your Lake's Water Quality, WD-BB-11, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Anthropogenic Phosphorus and New Hampshire Waterbodies, NHDES-WSPCD-95-6, NHDES Booklet, (603) 271-3503

Vegetated Phosphorus Buffer Strips, NH Lakes Association pamphlet, (603) 226-0299 or www.nhlakes.org

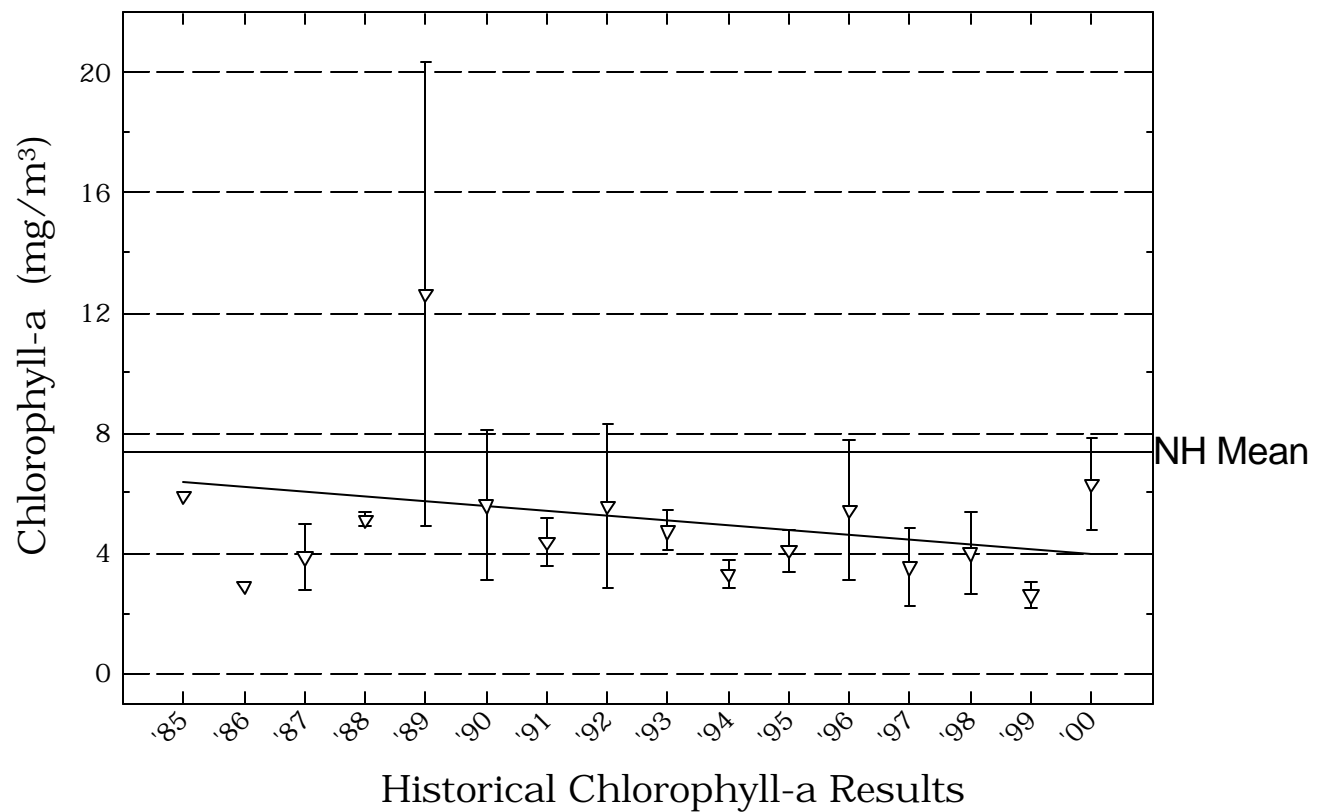
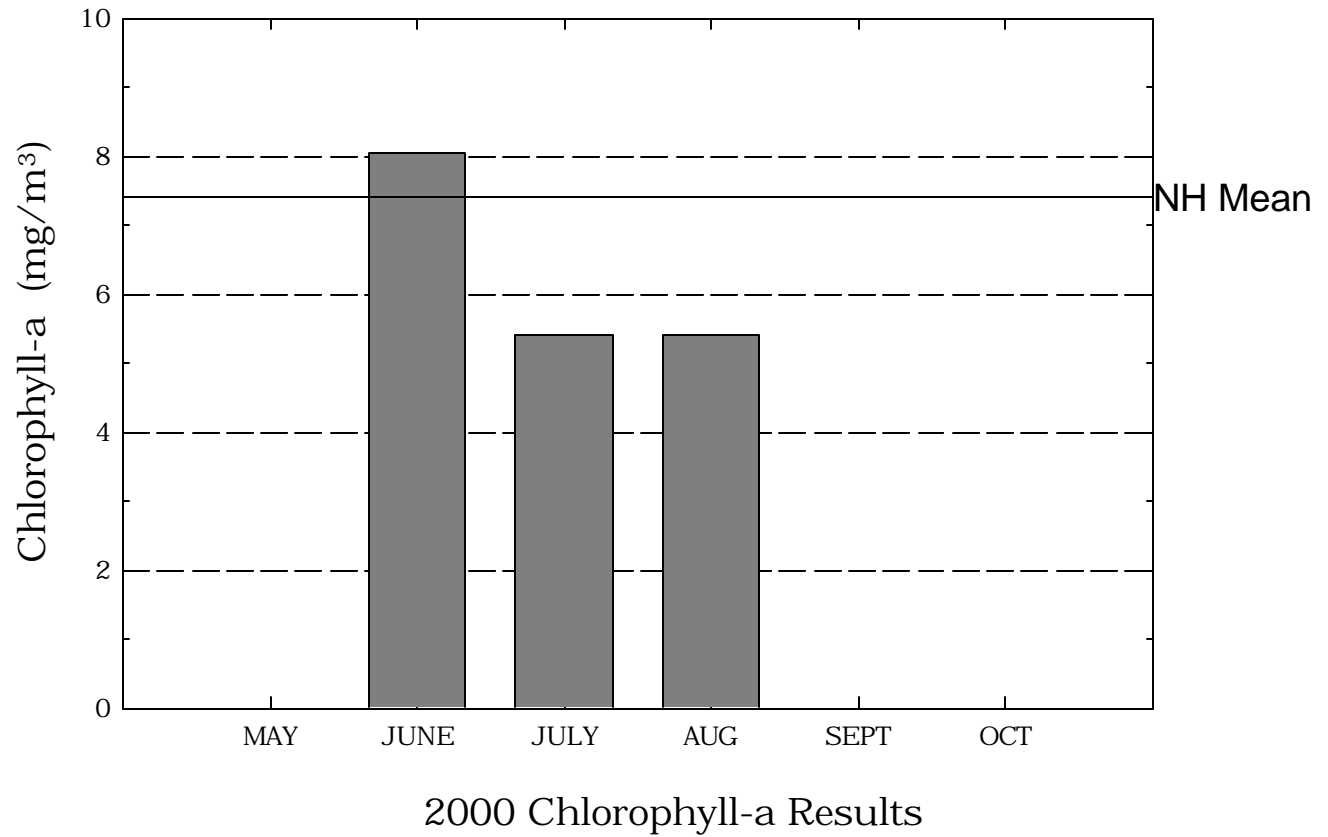
What Can You Do to Prevent Shoreland Erosion?, WD-BB-30, NHDES Fact Sheet, (603) 271-3503 or www.state.nh.us

Nonpoint Source Pollution and Stormwater Fact Sheet Package. Terrene Institute. (800) 726-5253, or www.terrene.org.

Best Management Practices to Control Nonpoint Source Pollution: A Guide for Citizens and Town Officials, NHDES-WD 97-8, NHDES Booklet, (603) 271-3503

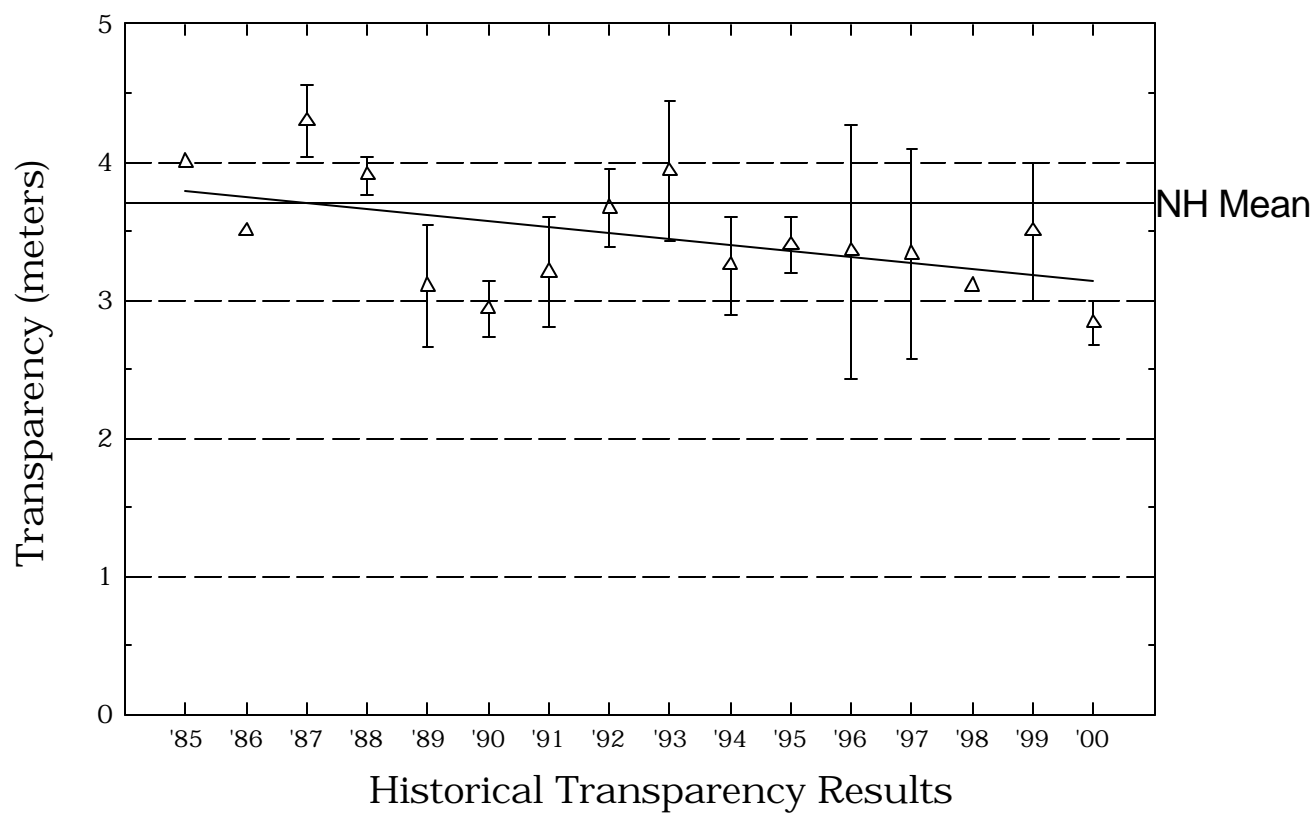
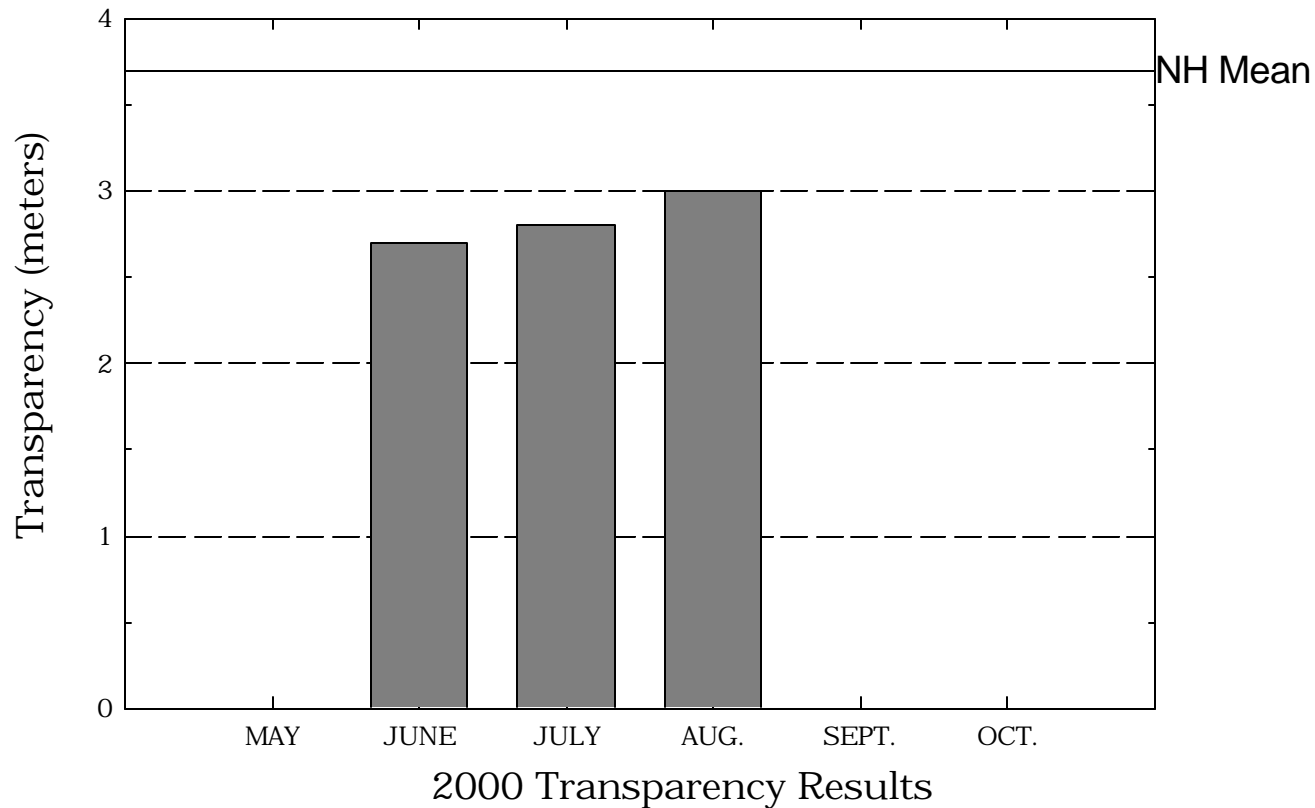
Mountainview Lake

Figure 1. Monthly and Historical Chlorophyll-a Results



Mountainview Lake

Figure 2. Monthly and Historical Transparency Results



Mountainview Lake

Figure 3. Monthly and Historical Total Phosphorus Data.

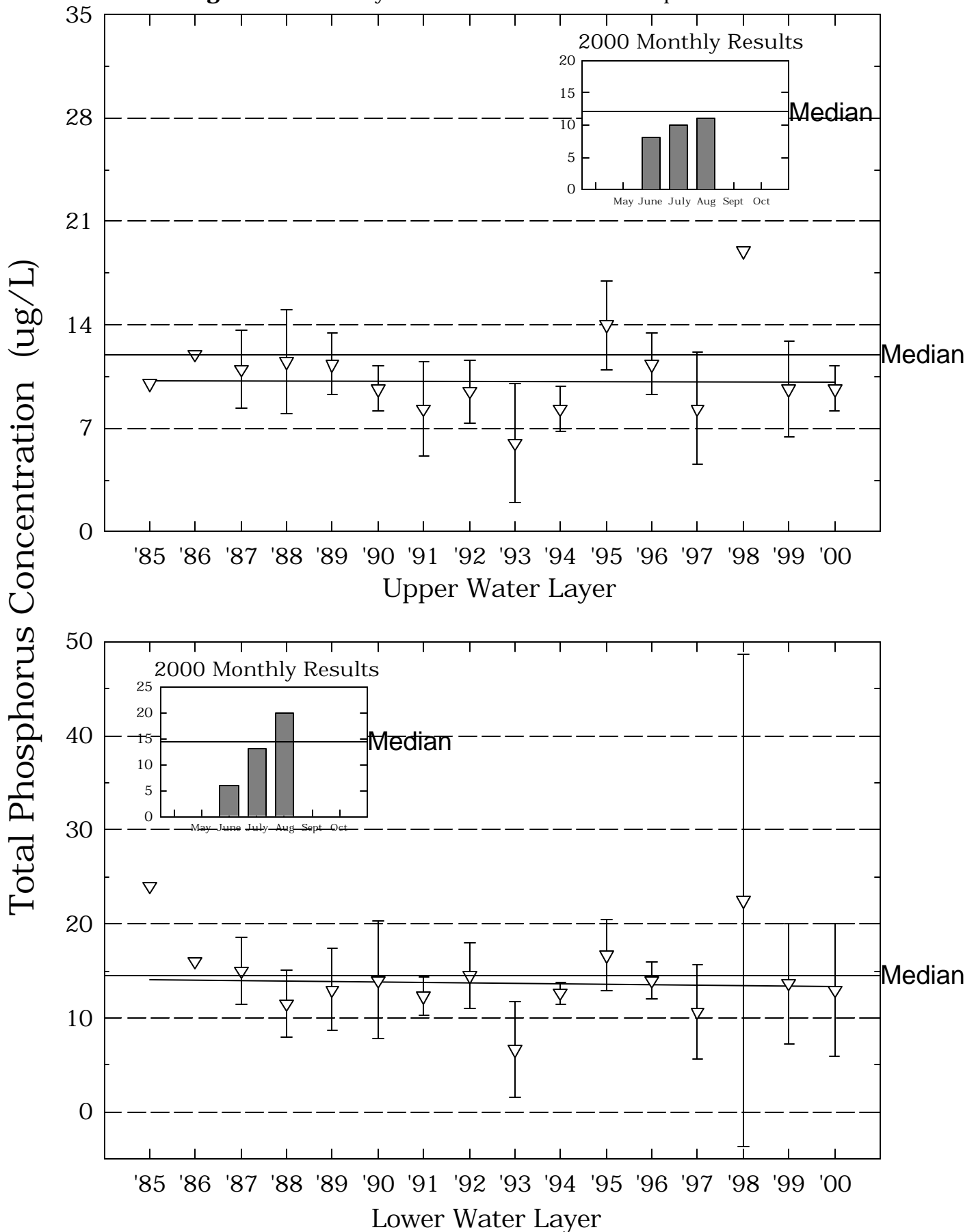


Table 1.**MOUNTAINVIEW LAKE****SUNAPEE**

**Chlorophyll-a results (mg/m³) for current year and historical
sampling periods.**

Year	Minimum	Maximum	Mean
1985	5.90	5.90	5.90
1986	2.91	2.91	2.91
1987	3.19	5.14	3.88
1988	4.95	5.45	5.23
1989	6.36	21.28	12.63
1990	2.91	7.82	5.60
1991	3.84	5.31	4.38
1992	3.11	7.51	4.75
1993	4.20	5.49	4.74
1994	2.89	3.82	3.32
1995	3.29	4.58	4.09
1996	3.65	8.08	5.45
1997	2.35	4.94	3.53
1998	3.06	4.95	3.69
1999	2.11	2.87	2.60
2000	5.42	8.06	6.30

Table 2.**MOUNTAINVIEW LAKE****SUNAPEE****Phytoplankton species and relative percent abundance.****Summary for current and historical sampling seasons.**

Date of Sample	Species Observed	Relative % Abundance
06/06/1985	ASTERIONELLA	29
	RHIZOLENIA	22
	TABELLARIA	19
07/17/1987	ASTERIONELLA	31
	DINOBRYON	29
	CHRYSPHAERELLA	17
07/01/1988	CHRYSPHAERELLA	29
	TABELLARIA	21
	CERATIUM	17
07/06/1989	DINOBRYON	91
	ASTERIONELLA	
	TABELLARIA	
07/11/1990	TABELLARIA	37
	ASTERIONELLA	17
	DINOBRYON	3
06/18/1991	TABELLARIA	38
	SYNURA	26
	ASTERIONELLA	7
06/22/1992	DINOBRYON	48
	SYNURA	10
	CHRYSPHAERELLA	7
07/06/1992	DINOBRYON	60
	ASTERIONELLA	25
	MELOSIRA	5
06/21/1993	ASTERIONELLA	46
	DINOBRYON	13
06/26/1994	RHIZOLENIA	32
	ASTERIONELLA	25
	DINOBRYON	20
06/11/1995	DINOBRYON	53
	ASTERIONELLA	20
	RHIZOLENIA	9

Table 2.**MOUNTAINVIEW LAKE****SUNAPEE****Phytoplankton species and relative percent abundance.****Summary for current and historical sampling seasons.**

Date of Sample	Species Observed	Relative % Abundance
06/02/1996	DINOBRYON	89
	RHIZOLENIA	6
	ASTERIONELLA	2
06/08/1997	DINOBRYON	62
	UROGLENOPSIS	14
	ASTERIONELLA	13
06/28/1998	ASTERIONELLA	64
	DINOBRYON	14
	TABELLARIA	6
06/20/1999	DINOBRYON	48
	RHIZOLENIA	27
	GLOEOCAPSA	8
06/19/2000	UROGLENOPSIS	37
	DINOBRYON	16
	SYNURA	14

Table 3.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary of current and historical Secchi Disk
transparency results (in meters).**

Year	Minimum	Maximum	Mean
1985	4.0	4.0	4.0
1986	3.5	3.5	3.5
1987	4.0	4.5	4.3
1988	3.6	4.0	3.8
1989	2.8	3.6	3.1
1990	2.7	3.1	2.9
1991	2.8	3.6	3.2
1992	3.5	4.0	3.6
1993	3.5	4.5	3.9
1994	3.0	3.5	3.2
1995	3.2	3.6	3.4
1996	2.7	4.0	3.3
1997	2.5	4.0	3.3
1998	3.1	3.1	3.1
1999	3.0	4.0	3.5
2000	2.7	3.0	2.8

Table 4.

**MOUNTAINVIEW LAKE
SUNAPEE**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
ABOVE SEPTAGE				
	1998	5.20	5.32	5.26
BESIDE SEPTAGE				
	1998	5.21	5.43	5.31
CHANDLER BROOK				
	1997	6.68	6.73	6.70
EPILIMNION				
	1985	6.98	6.98	6.98
	1986	6.93	6.93	6.93
	1987	6.74	6.94	6.86
	1988	6.27	6.92	6.56
	1989	6.78	7.17	6.97
	1990	6.73	6.88	6.82
	1991	6.86	7.10	7.00
	1992	6.20	6.92	6.48
	1993	6.70	7.31	6.87
	1994	6.94	7.89	7.12
	1995	6.70	7.09	6.86
	1996	6.62	6.92	6.78
	1997	6.76	6.92	6.82
	1998	6.80	6.92	6.88
	1999	6.78	7.01	6.86
	2000	6.55	6.83	6.67

Table 4.**MOUNTAINVIEW LAKE****SUNAPEE****pH summary for current and historical sampling seasons.****Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
HAMEL BELOW AUTOS				
	1997	6.63	6.84	6.72
HAMEL BK ABOVE POND				
	1996	6.63	6.77	6.69
	1997	6.48	6.48	6.48
	1998	6.07	6.07	6.07
HAMEL BK ADD				
	1992	6.50	6.50	6.50
HAMEL BK AT 103				
	1994	7.06	7.87	7.30
	1995	6.83	7.34	7.05
	1996	6.77	7.21	6.96
	1997	6.90	7.11	6.99
	1998	6.90	7.41	7.17
	1999	7.07	7.08	7.07
	2000	6.26	7.04	6.56
HAMEL BK AT TRAILER				
	1994	7.64	7.64	7.64
	1995	6.41	6.41	6.41
	1997	6.76	6.76	6.76
HAMEL BK GOSHEN RD				
	1994	6.99	6.99	6.99

Table 4.

**MOUNTAINVIEW LAKE
SUNAPEE**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
HAMEL BK HEAD				
	1997	5.91	5.91	5.91
HAMEL BK HORSEBARN				
	1997	5.98	5.98	5.98
HAMEL BK YELLOW HOUS				
	1999	6.44	6.44	6.44
HAMEL BK				
	1986	6.56	6.56	6.56
	1987	6.85	6.85	6.85
	1988	6.26	6.86	6.45
	1989	6.59	6.69	6.65
	1990	6.64	6.78	6.73
	1991	6.76	6.76	6.76
	1992	6.20	6.50	6.36
	1993	6.63	6.63	6.63
	1994	6.18	7.78	6.59
	1996	5.36	6.52	5.85
	1997	6.35	6.45	6.39
	1998	6.43	6.72	6.58
	1999	6.43	7.22	6.60
	2000	6.41	6.51	6.45
HANSEN CHASE RD BK				
	1994	5.22	6.43	5.50
	1995	5.46	5.46	5.46

Table 4.

**MOUNTAINVIEW LAKE
SUNAPEE**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
HYPOLIMNION	1996	5.07	5.10	5.08
	1997	5.18	5.18	5.18
HYPOLIMNION	1986	6.54	6.54	6.54
	1987	6.77	6.90	6.81
	1988	6.16	6.90	6.43
	1989	6.74	6.96	6.83
	1990	6.14	6.91	6.47
	1991	6.30	7.10	6.56
	1992	6.28	6.40	6.32
	1993	6.50	6.70	6.56
	1994	6.28	7.07	6.61
	1995	6.42	6.61	6.53
	1996	6.31	6.37	6.34
	1997	6.36	6.76	6.54
	1998	6.30	6.35	6.32
	1999	6.17	6.94	6.38
	2000	6.18	6.44	6.32
METALIMNION	1990	6.80	6.95	6.87
	1992	6.40	6.40	6.40
	1998	6.68	6.68	6.68
MUD POND BK	1987	6.23	6.51	6.31
	1988	6.21	6.40	6.32

Table 4.

**MOUNTAINVIEW LAKE
SUNAPEE**

**pH summary for current and historical sampling seasons.
Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
OUTLET	1989	6.42	6.54	6.47
	1992	6.38	6.46	6.41
	1993	6.40	6.54	6.46
	1994	7.73	7.73	7.73
	1996	5.73	6.32	5.93
	1997	5.92	5.92	5.92
	1998	6.43	6.43	6.43
	2000	6.42	6.48	6.45
ROUTE 103 INLET	1987	6.84	6.89	6.86
	1988	6.38	6.82	6.52
	1989	6.85	6.92	6.89
	1990	6.41	6.88	6.63
	1991	6.80	6.90	6.85
	1992	6.45	6.89	6.63
	1993	6.70	6.80	6.76
	1994	6.49	7.93	6.66
	1995	6.83	6.91	6.86
	1996	6.72	6.92	6.80
	1997	6.88	6.88	6.88
	1998	6.72	6.81	6.78
	1999	6.74	7.17	6.89
	2000	6.61	6.84	6.71
ROUTE 103 INLET	1987	6.72	6.72	6.72
	1988	5.89	6.68	6.16
	1989	6.18	6.67	6.36

Table 4.**MOUNTAINVIEW LAKE****SUNAPEE****pH summary for current and historical sampling seasons.****Values in units, listed by station and year.**

Station	Year	Minimum	Maximum	Mean
	1990	6.45	6.59	6.51
	1991	6.59	6.59	6.59
	1992	6.00	6.46	6.21
	1993	6.40	6.68	6.48
	1994	6.06	7.67	6.37
	1995	6.31	6.66	6.49
	1996	6.23	6.46	6.33
	1997	6.25	7.18	6.49
	1998	6.38	6.47	6.43
	1999	5.84	6.45	6.14
	2000	6.30	6.74	6.44

Table 5.**MOUNTAINVIEW LAKE****SUNAPEE****Summary of current and historical Acid Neutralizing Capacity.****Values expressed in mg/L as CaCO₃.****Epilimnetic Values**

Year	Minimum	Maximum	Mean
1985	4.90	4.90	4.90
1986	5.26	5.26	5.26
1987	5.60	5.60	5.60
1988	5.90	6.50	6.13
1989	5.60	7.10	6.30
1990	5.10	6.10	5.50
1991	6.10	6.80	6.43
1992	6.20	15.40	8.63
1993	5.70	9.30	7.33
1994	3.90	6.50	5.20
1995	5.70	5.90	5.77
1996	5.40	7.60	6.17
1997	5.00	5.90	5.37
1998	5.40	9.00	7.20
1999	4.00	6.20	5.30
2000	5.30	6.20	5.77

Table 6.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
ABOVE SEPTAGE				
	1998	40.9	64.8	52.8
BESIDE SEPTAGE				
	1998	39.8	63.6	51.7
CHANDLER BROOK				
	1997	113.7	115.4	114.5
EPILIMNION	1985	77.0	77.0	77.0
	1986	79.0	79.0	79.0
	1987	75.0	77.7	76.4
	1988	81.0	82.9	81.8
	1989	89.2	92.3	90.8
	1990	85.6	89.0	87.4
	1991	86.8	91.8	89.9
	1992	101.0	109.5	105.6
	1993	110.1	119.5	116.2
	1994	102.6	107.6	104.5
	1995	104.8	121.5	115.1
	1996	97.5	106.6	101.1
	1997	103.0	115.2	110.6
	1998	111.8	124.3	120.1
	1999	124.9	132.9	129.5
	2000	117.7	786.0	340.5

Table 6.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
HAMEL BELOW AUTOS				
	1997	32.3	41.1	36.7
HAMEL BK ABOVE POND				
	1996	235.0	290.0	262.5
	1997	497.8	497.8	497.8
	1998	41.4	41.4	41.4
HAMEL BK ADD				
	1992	239.0	239.0	239.0
HAMEL BK AT 103				
	1994	115.6	310.0	212.8
	1995	234.0	346.0	272.6
	1996	177.7	277.4	224.3
	1997	240.7	304.0	272.3
	1998	189.3	270.0	243.1
	1999	264.0	336.0	300.0
	2000	33.9	220.0	142.2
HAMEL BK AT TRAILER				
	1994	131.3	131.3	131.3
	1995	437.0	437.0	437.0
	1997	132.7	132.7	132.7
HAMEL BK GOSHEN RD				
	1994	111.0	111.0	111.0
HAMEL BK HEAD				
	1997	20.5	20.5	20.5

Table 6.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
HAMEL BK HORSEBARN				
	1997	22.5	22.5	22.5
HAMEL BK YELLOW HOUS				
	1999	270.0	270.0	270.0
HAMEL BK				
	1986	126.7	126.7	126.7
	1987	137.0	137.0	137.0
	1988	126.5	143.5	137.0
	1989	148.0	189.6	170.8
	1990	110.7	148.3	134.5
	1991	159.4	159.4	159.4
	1992	187.1	234.0	217.3
	1993	218.0	218.0	218.0
	1994	112.4	188.0	145.6
	1996	48.7	192.5	146.3
	1997	181.9	292.0	222.9
	1998	150.8	272.0	219.2
	1999	203.0	229.0	219.0
	2000	167.3	197.0	183.1
HANSEN CHASE RD BK				
	1994	20.0	63.5	41.7
	1995	74.1	74.1	74.1
	1996	52.1	59.6	55.8
	1997	62.5	62.5	62.5

Table 6.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
HYPOLIMNION	1986	79.0	79.0	79.0
	1987	74.0	78.1	76.6
	1988	81.4	82.9	82.0
	1989	86.6	93.5	90.3
	1990	89.6	92.7	91.3
	1991	86.9	94.3	91.0
	1992	103.0	109.5	106.3
	1993	112.9	119.0	116.7
	1994	102.2	106.6	103.9
	1995	99.8	119.0	112.5
	1996	96.7	107.7	101.0
	1997	101.3	115.6	110.2
	1998	111.1	122.0	118.3
	1999	123.9	132.7	129.4
	2000	110.4	124.2	117.5
METALIMNION	1990	85.9	90.8	88.3
	1992	104.1	104.1	104.1
	1998	112.9	112.9	112.9
MUD POND BK	1987	52.6	55.3	53.8
	1988	63.2	76.2	69.6
	1989	71.6	80.5	77.0
	1992	144.2	146.5	145.3

Table 6.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
	1993	125.7	140.5	133.1
	1996	83.8	83.9	83.8
	1997	105.5	105.5	105.5
	1998	88.3	88.3	88.3
	2000	94.3	100.3	97.3
OUTLET	1987	75.0	78.0	76.5
	1988	80.7	82.1	81.4
	1989	37.0	93.0	73.1
	1990	87.4	89.3	88.1
	1991	87.0	93.1	90.3
	1992	103.5	109.3	106.7
	1993	110.3	120.7	116.5
	1994	107.2	110.5	108.5
	1995	106.0	121.7	115.4
	1996	97.8	106.2	102.0
	1997	101.3	101.3	101.3
	1998	111.8	122.9	119.2
	1999	125.3	132.6	129.2
	2000	113.4	118.0	116.3
ROUTE 103 INLET	1987	37.3	37.3	37.3
	1988	56.0	91.6	69.6
	1989	34.5	35.4	34.9
	1990	30.5	32.0	31.5
	1991	38.6	38.6	38.6

Table 6.**MOUNTAINVIEW LAKE
SUNAPEE****Specific conductance results from current and historic
sampling seasons. Results in uMhos/cm.**

Station	Year	Minimum	Maximum	Mean
	1992	35.5	39.1	37.0
	1993	36.6	40.0	38.4
	1994	29.0	38.8	33.8
	1995	32.7	73.4	49.3
	1996	29.3	54.6	36.7
	1997	29.4	321.0	104.4
	1998	28.9	33.2	31.2
	1999	8.7	33.5	24.4
	2000	31.9	176.0	113.9

Table 8.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
ABOVE SEPTAGE				
	1998	30	52	41
BESIDE SEPTAGE				
	1998	18	20	19
CHANDLER BROOK				
	1997	5	8	6
EPILIMNION				
	1985	10	10	10
	1986	12	12	12
	1987	9	14	11
	1988	9	26	16
	1989	9	13	11
	1990	8	11	9
	1991	6	12	8
	1992	8	11	9
	1993	2	10	6
	1994	7	10	8
	1995	11	17	14
	1996	9	13	11
	1997	4	11	8
	1998	19	19	19
	1999	6	12	9
	2000	8	11	9

Table 8.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
HAMEL BELOW AUTOS				
	1997	4	8	6
HAMEL BK ABOVE POND				
	1996	24	48	36
	1997	7	7	7
	1998	10	10	10
HAMEL BK ADD				
	1992	26	26	26
HAMEL BK AT 103				
	1994	44	57	50
	1995	16	59	37
	1996	14	33	23
	1997	21	33	27
	1998	17	42	25
	1999	23	36	29
	2000	12	88	41
HAMEL BK AT TRAILER				
	1994	14	14	14
	1995	9	9	9
	1997	2	2	2
HAMEL BK GOSHEN RD				
	1994	4	4	4
HAMEL BK HEAD				
	1997	3	3	3

Table 8.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
HAMEL BK HORSEBARN				
	1997	2	2	2
HAMEL BK				
	1985	8	8	8
	1986	17	17	17
	1987	18	18	18
	1988	9	23	16
	1989	12	14	13
	1990	6	12	9
	1991	9	9	9
	1992	10	11	10
	1993	5	5	5
	1994	2	36	16
	1996	3	31	14
	1997	7	22	12
	1998	14	28	21
	1999	17	41	27
	2000	6	49	23
HANSEN CHASE RD BK				
	1994	45	61	53
	1995	57	57	57
	1996	14	31	22
	1997	22	22	22
HYPOLIMNION				
	1985	24	24	24
	1986	16	16	16

Table 8.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
	1987	12	19	15
	1988	9	15	12
	1989	10	18	13
	1990	7	19	14
	1991	10	14	12
	1992	12	18	15
	1993	1	11	6
	1994	12	14	12
	1995	14	21	16
	1996	12	16	14
	1997	6	16	10
	1998	4	41	16
	1999	9	21	13
	2000	6	20	13
METALIMNION				
	1990	9	12	10
	1992	7	7	7
	1998	12	12	12
MUD POND BK				
	1985	19	19	19
	1986	33	33	33
	1987	16	24	20
	1988	10	29	18
	1989	16	22	19
	1992	14	20	17
	1993	12	18	15

Table 8.**MOUNTAINVIEW LAKE****SUNAPEE**

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
	1996	11	13	12
	1997	10	10	10
	1998	11	11	11
	2000	8	13	10
OUTLET				
	1987	13	14	13
	1988	7	52	24
	1989	11	13	12
	1990	7	12	9
	1991	7	10	8
	1992	10	11	10
	1993	3	13	7
	1994	8	9	8
	1995	14	16	15
	1996	9	13	11
	1997	9	9	9
	1998	8	11	10
	1999	8	9	8
	2000	6	10	8
ROUTE 103 INLET				
	1987	22	22	22
	1988	19	140	60
	1989	15	22	18
	1990	7	15	11
	1991	23	23	23
	1992	13	19	16

Table 8.

MOUNTAINVIEW LAKE

SUNAPEE

**Summary historical and current sampling season Total
Phosphorus data. Results in ug/L.**

Station	Year	Minimum	Maximum	Mean
	1993	1	20	10
	1994	3	20	12
	1995	16	29	24
	1996	3	15	9
	1997	1	12	7
	1998	11	33	22
	1999	13	44	25
	2000	6	39	20

Table 9.
MOUNTAINVIEW LAKE
SUNAPEE

Current year dissolved oxygen and temperature data.

Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
June 19, 2000			
0.1	19.6	8.3	90.3
1.0	19.5	8.3	90.0
2.0	19.3	8.3	89.8
3.0	16.6	8.5	87.1
4.0	15.8	6.8	68.7
5.0	14.3	3.3	31.8
6.0	12.7	0.4	3.5

Table 10.

**MOUNTAINVIEW LAKE
SUNAPEE**

Historic Hypolimnetic dissolved oxygen and temperature data.

Date	Depth (meters)	Temperature (celsius)	Dissolved Oxygen (mg/L)	Saturation (%)
June 6, 1985	6.0	13.5	2.8	26.0
June 4, 1986	5.5	12.2	4.6	42.0
July 17, 1987	5.5	15.6	0.9	9.0
July 1, 1988	6.0	12.2	-0.5	-3.0
July 6, 1989	5.5	12.5	2.4	22.0
July 11, 1990	5.5	13.8	1.8	17.4
June 22, 1992	6.0	11.0	0.4	3.6
July 6, 1992	5.5	14.0	0.5	5.0
June 21, 1993	6.0	15.0	0.7	7.0
June 26, 1994	4.5	15.8	3.5	34.0
June 11, 1995	6.0	11.9	3.7	33.0
June 2, 1996	6.0	11.9	5.8	52.0
June 8, 1997	5.5	11.3	7.8	69.0
June 28, 1998	6.0	16.3	3.2	32.0
June 20, 1999	5.5	15.4	3.3	32.7
June 19, 2000	6.0	12.7	0.4	3.5

Table 11.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
ABOVE SEPTAGE				
	1998	0.7	4.9	2.8
BESIDE SEPTAGE				
	1998	0.9	2.1	1.5
CHANDLER BROOK				
	1997	0.6	1.1	0.8
EPILIMNION				
	1992	0.9	0.9	0.9
	1993	1.0	1.0	1.0
	1994	0.9	1.0	0.9
	1995	1.0	1.1	1.0
	1996	0.4	1.0	0.7
	1997	0.5	1.5	0.8
	1998	0.3	2.4	1.7
	1999	0.4	2.1	1.1
	2000	0.4	1.2	0.9
HAMEL BELOW AUTOS				
	1997	0.1	0.3	0.2
HAMEL BK ABOVE POND				
	1996	5.8	5.8	5.8
	1997	3.2	3.2	3.2
	1998	0.3	0.3	0.3
HAMEL BK ADD				
	1992	2.5	2.5	2.5
HAMEL BK AT 103				
	1994	4.6	4.6	4.6

Table 11.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
	1995	4.5	5.5	5.0
	1996	1.6	2.5	2.0
	1997	0.6	2.5	1.5
	1998	1.6	1.7	1.6
	1999	1.1	4.0	2.5
	2000	0.3	3.3	1.7
HAMEL BK AT TRAILER				
	1995	0.5	0.5	0.5
	1997	0.1	0.1	0.1
HAMEL BK GOSHEN RD				
	1994	0.4	0.4	0.4
HAMEL BK HEAD				
	1997	1.2	1.2	1.2
HAMEL BK HORSEBARN				
	1997	0.0	0.0	0.0
HAMEL BK YELLOW HOUS				
	1999	0.9	0.9	0.9
HAMEL BK				
	1992	0.7	1.2	0.9
	1994	0.5	1.8	1.1
	1996	0.2	0.7	0.5
	1997	0.6	1.9	1.1
	1998	0.3	2.2	1.3
	1999	0.6	1.9	1.1
	2000	0.3	9.7	3.5
HANSEN CHASE RD BK				

Table 11.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
	1994	0.9	0.9	0.9
	1996	0.4	0.4	0.4
	1997	0.3	0.3	0.3
HYPOLIMNION				
	1992	0.7	1.2	0.9
	1993	1.0	1.1	1.0
	1994	0.9	1.5	1.2
	1995	1.7	1.9	1.8
	1996	0.9	1.4	1.1
	1997	0.6	1.2	0.9
	1998	0.5	1.5	1.1
	1999	1.0	2.6	1.5
	2000	0.6	5.8	2.6
METALIMNION				
	1998	0.6	0.6	0.6
MUD POND BK				
	1992	0.7	0.8	0.7
	1993	0.5	0.5	0.5
	1996	1.0	1.0	1.0
	1997	0.4	0.4	0.4
	1998	0.4	0.4	0.4
	2000	0.5	2.0	1.2
OUTLET				
	1992	0.8	1.0	0.9
	1993	0.8	0.9	0.8
	1994	0.9	1.2	1.0
	1995	1.2	1.5	1.3

Table 11.**MOUNTAINVIEW LAKE
SUNAPEE****Summary of current year and historic turbidity sampling.
Results in NTU's.**

Station	Year	Minimum	Maximum	Mean
	1996	0.7	0.9	0.8
	1997	0.6	0.6	0.6
	1998	0.3	1.0	0.7
	1999	0.5	1.9	1.1
	2000	0.5	1.0	0.8
ROUTE 103 INLET				
	1992	0.6	0.9	0.7
	1993	0.6	0.9	0.7
	1994	0.4	0.9	0.7
	1995	1.4	5.1	3.2
	1996	0.2	0.3	0.2
	1997	0.1	0.7	0.3
	1998	0.0	0.7	0.5
	1999	0.3	2.1	0.9
	2000	0.1	7.4	2.6

Table 12.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Summary of current year bacteria sampling.
Results in counts per 100ml.**

Location	Date	E. Coli <small>See Note Below</small>
BENNETT COTTAGE	August 7	4
BETWEEN WHITE AND TRAILER	June 19	10
BETWEEN WHITE COTT & TRAILER	June 19	10
	July 17	16
	August 7	9999
	August 28	88
CORNER OF TRAILER	June 19	70
	June 19	70
	July 17	10
	August 7	9999
	August 28	55
HAMEL BK MOUTH	June 19	50
	June 19	50
	July 17	21
	August 28	63
WHITE COTTAGE	June 19	70
	July 17	20
	August 7	9999
	August 28	140
WHITE HOUSE	June 19	70
YELLOW COTTAGE		

NOTE: "<" means "less than" and ">" means "greater than"

Table 12.

**MOUNTAINVIEW LAKE
SUNAPEE**

**Summary of current year bacteria sampling.
Results in counts per 100ml.**

Location	Date	E. Coli
		See Note Below
YELLOW COTTAGE	June 19	40
	June 19	40
	July 17	29
	August 7	9999
	August 28	103